

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 (Currently Amended). An active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first electrode formed over a substrate;

a first electroluminescent film in contact with the first electrode;

a second electrode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the second electrode; and

a third electrode in contact with the second electroluminescent film,

wherein electrodes comprising the first electrode and the third electrode function as one of an anode or a cathode and the second electrode functions as the other of the anode or the cathode, and

wherein an electric current flow direction through the first electroluminescent film is different from that through the second electroluminescent film.

2 (Currently Amended). An active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first electrode formed over a substrate;

a first electroluminescent film in contact with the first electrode;

a second electrode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the second electrode; and

a third electrode in contact with the second electroluminescent film,

wherein electrodes comprising the first electrode and the third electrode are electrically connected and function as one of an anode or a cathode and the second electrode functions as the other of the anode or the cathode, and

wherein an electric current flow direction through the first electroluminescent film is different from that through the second electroluminescent film.

3 (Currently Amended). An active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first anode formed over a substrate;

a first electroluminescent film in contact with the first anode;

a cathode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the cathode; and

a second anode in contact with the second electroluminescent film,

wherein an electric current flow direction through the first electroluminescent film is different from that through the second electroluminescent film.

4 (Currently Amended). An active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first cathode formed over a substrate;

a first electroluminescent film in contact with the first cathode;

an anode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the anode; and

a second cathode in contact with the second electroluminescent film,
wherein an electric current flow direction through the first electroluminescent film is different from that through the second electroluminescent film.

5 (Canceled).

6 (Currently Amended). The active matrix electroluminescence display device according to any one of claims 1 to 4,

wherein light is taken out from the substrate side by preventing only a farthest electrode from the substrate from transmitting light.

7 (Currently Amended). The active matrix electroluminescence display device according to any one of claims 1 to 4,

wherein light is taken out from the opposite side of the substrate by preventing only a closest electrode to the substrate from transmitting light.

8 (Currently Amended). The active matrix electroluminescence display device according to any one of claims 1 and 2,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first electrode, the second electrode and the third electrode transmissive.

9 (Currently Amended). The active matrix electroluminescence display device according to

any one of claims 1 to 4,

wherein at least two electroluminescent elements each of which emits different light are used for the electroluminescence device.

10 (Canceled).

11 (Currently Amended). The active matrix electroluminescence display device according to any one of claims 3 and 4,

wherein the anode is made of a material having work function 4.5 to 5.5 eV and the cathode is made of a material having work function 2.5 to 3.5 eV.

12 (Currently Amended). The active matrix electroluminescence display device according to any one of claims 3 and 4,

wherein the anode comprises at least one of Ti, TiN, TiSi_xN_y , Ni, W, WSi_x , WN_x , WSi_xN_y , NbN, Mo, Cr, Pt, Se, Pd, Ir, and Au, and the cathode comprises at least one element belonging to the 1st group and the 2nd group of the periodic table.

13 (Currently Amended). An electric appliance comprises the active matrix electroluminescence display device according to any one of claims 1 to 4 as a display part.

14 (Previously Presented). The electric appliance according to claim 13,

wherein the electric appliance is a video camera, a digital camera, a goggle type display, a

navigation system, an audio reproduction device, a notebook personal computer, a game machine, a portable information terminal, or an image reproduction device provided with a recording medium.

15 (Currently amended). The active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first anode formed over a substrate;

a first electroluminescent film in contact with the first anode;

a cathode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the cathode; and

a second anode in contact with the second electroluminescent film,

wherein holes are injected into the first electroluminescent film from the first anode and are injected into the second electroluminescent film from the second anode, and

wherein electrons are injected into both the first electroluminescent film and the second electroluminescent film from the cathode.

16 (Currently amended). The active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first cathode formed over a substrate;

a first electroluminescent film in contact with the first cathode;

an anode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the anode; and

a second cathode in contact with the second electroluminescent film,

wherein electrons are injected into the first electroluminescent film from the first cathode and are injected into the second electroluminescent film from the second cathode, and

wherein holes are injected into both the first electroluminescent film and the second electroluminescent film from the anode.

17 (Currently amended). The active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first electrode formed over a substrate;

a first electroluminescent film in contact with the first electrode;

a second electrode in contact with the first electroluminescent film;

a second electroluminescent film in contact with the second electrode; and

a third electrode in contact with the second electroluminescent film,

wherein electrodes comprising the first electrode and the third electrode function as an anode and the second electrode functions as a cathode,

wherein the first electroluminescent film comprising a hole transport layer formed over the first electrode and an electron transport layer formed over the hole transport layer, and

wherein the second electroluminescent film comprising an electron transport layer formed over the second electrode and a hole transport layer formed over the electron transport layer.

18 (Currently amended). The active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first electrode formed over a substrate;

a first electroluminescent film in contact with the first electrode;
a second electrode in contact with the first electroluminescent film;
a second electroluminescent film in contact with the second electrode; and
a third electrode in contact with the second electroluminescent film,
wherein electrodes comprising the first electrode and the third electrode are electrically connected and function as an anode and the second electrode functions as a cathode,
wherein the first electroluminescent film comprising a hole transport layer formed over the first electrode and an electron transport layer formed over the hole transport layer, and
wherein the second electroluminescent film comprising an electron transport layer formed over the second electrode and a hole transport layer formed over the electron transport layer.

19 (Currently amended). The active matrix electroluminescence display device having plural pixels, each of the pixels comprising;

a first anode formed over a substrate;
a first electroluminescent film in contact with the first anode;
a cathode in contact with the first electroluminescent film;
a second electroluminescent film in contact with the cathode; and
a second anode in contact with the second electroluminescent film,
wherein the first electroluminescent film comprising a hole transport layer formed over the first anode and an electron transport layer formed over the hole transport layer, and
wherein the second electroluminescent film comprising an electron transport layer formed over the cathode and a hole transport layer formed over the electron transport layer.

20 (Currently amended). The active matrix electroluminescence display device according to claim 15,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first anode, the cathode and the second anode transmissive.

21 (Currently amended). The active matrix electroluminescence display device according to claim 16,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first cathode, the anode and the second cathode transmissive.

22 (Currently amended). The active matrix electroluminescence display device according to claim 17,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first electrode, the second electrode and the third electrode transmissive.

23 (Currently amended). The active matrix electroluminescence display device according to claim 18,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first electrode, the second electrode and the third electrode transmissive.

24 (Currently amended). The active matrix electroluminescence display device according to

claim 19,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first anode, the cathode and the second anode transmissive.

25 (Currently amended). The active matrix electroluminescence display device according to claim 15,

wherein at least two electroluminescent elements each of which emits different light are used for the electroluminescence device.

26 (Currently amended). The active matrix electroluminescence display device according to claim 16,

wherein at least two electroluminescent elements each of which emits different light are used for the electroluminescence device.

27 (Currently amended). The active matrix electroluminescence display device according to claim 17,

wherein at least two electroluminescent elements each of which emits different light are used for the electroluminescence device.

28 (Currently amended). The active matrix electroluminescence display device according to claim 18,

wherein at least two electroluminescent elements each of which emits different light are used

for the electroluminescence device.

29 (Currently amended). The active matrix electroluminescence display device according to claim 19,

wherein at least two electroluminescent elements each of which emits different light are used for the electroluminescence device.

30 (Currently amended). The active matrix electroluminescence display device according to claim 3,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first anode, the cathode and the second anode transmissive.

31 (Currently amended). The active matrix electroluminescence display device according to claim 4,

wherein light is taken out from both of the substrate side and the opposite side of the substrate by making the first cathode, the anode and the second cathode transmissive.

32 (New). The active matrix display device according to claim 1, wherein each of the pixels further comprises a thin film transistor connected to the first electrode.

33 (New). The active matrix display device according to claim 2, wherein each of the pixels further comprises a thin film transistor connected to the first electrode.

34. (New). The active matrix display device according to claim 3, wherein each of the pixels further comprises a thin film transistor connected to the first anode.

35 (New). The active matrix display device according to claim 4, wherein each of the pixels further comprises a thin film transistor connected to the first cathode.

36 (New). The active matrix display device according to claim 15, wherein each of the pixels further comprises a thin film transistor connected to the first anode.

37 (New). The active matrix display device according to claim 16, wherein each of the pixels further comprises a thin film transistor connected to the first cathode.

38 (New). The active matrix display device according to claim 17, wherein each of the pixels further comprises a thin film transistor connected to the first electrode.

39 (New). The active matrix display device according to claim 18, wherein each of the pixels further comprises a thin film transistor connected to the first electrode.

40 (New). The active matrix display device according to claim 19, wherein each of the pixels further comprises a thin film transistor connected to the first anode.